SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

SAULT STE. MARIE, ONTARIO

COURSE OUTLINE

COURSE TITLE: Pre-Trades/Tech Mathematics 1

CODE NO. : MTH162-3   **SEMESTER:** One

PROGRAM: Pre-Trades / Pre-Technology

AUTHOR: Math Department

DATE: June 2014   **PREVIOUS OUTLINE DATED:** June 2013

APPROVED: "Colin Kirkwood"   June/14

_____   _____

                     DEAN   **DATE**

TOTAL CREDITS: 3

PREREQUISITE(S): None

HOURS/WEEK: 3

Pre-Trades / Pre-Technology Math   MTH 162-3

I.   COURSE DESCRIPTION:

This first level mathematics course for the pre-trades and technology programs will allow students to establish their math preparedness level. Students will use a variety of math study skills and problem-solving strategies to become ready for college-level trades or technology math courses. Topics of focus include: fundamental concepts including arithmetic operations and concepts in measurement, ratio, proportion, percentages and introductory algebra.

II.   LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:

Upon successful completion of this course, the student will demonstrate the ability to:

1.   Recognize the importance of numeracy and math skills in trades and technology programs and employment.

Potential Elements of the Performance:

- identify appropriate sources for obtaining information on numeracy and math skills required in various trades and technology programs and employment
- build a vocabulary associated with numeracy and math skills required in trades and technology
- interview a tradesperson discussing the use of numeracy and math skills
- keep a log of numeracy and math skills references for a two week period
- create a Wordle pictograph to display a summary of the log data
- reflect on the importance of numeracy and math skills in trades and technology programs

2.   Classify the numeracy and math skills required by various trades and technology programs of personal interest.

Potential Elements of the Performance:

- develop, working with fellow students, an overall numeracy and math skills list for trades and technology programs for the Skills Table template

- participate in selected discussion groups based on various trades and technology program clusters to help determine specific numeracy and math skills for the cluster
- create a Skills Table, given a template, of numeracy and math skills for each of the trades and technology programs of interest

3. Evaluate one's own current numeracy and math skills.

    Potential Elements of the Performance:

    - complete a series of practice modules and quizzes using the MyMathTest software to gather information about current numeracy and math skills
    - work in groups to solve problems
    - conduct self and peer evaluations on use of problem solving strategies
    - create a portfolio of evidence gathered to evaluate one's own current numeracy and math skills
    - complete a Report Card assessing one's own current numeracy and math skills

4. Assess one's own current numeracy and math skills compared to those skills required by the trades and technology programs of interest.

    Potential Elements of the Performance:
    - create a table comparing one's Report Card to the Skill Table for each of the trades and technology programs of personal interest
    - create list summarizing the deficiencies in numeracy and math skills for one's "first choice" program

5. Create a plan to address any deficiencies in one's own numeracy and math skills required to meet the entry level criteria of the trades and technology program of choice.

    Potential Elements of the Performance:
    - write clear, specific goals
    - determine the actions necessary to address any deficiencies in one's own current numeracy and math skills to meet the entry level criteria of the trades and technology program of choice
    - participate in peer review activities to critique draft goals and action plans
    - produce a document that outlines the plan

Pre-Trades / Pre-Technology Math   MTH 162-3

III.   TOPICS:

1. Numeracy and Math Skills in Trades and Technology
2. Evaluating and Assess Numeracy and Math Skills
3. Setting Goals and Planning

IV.   REQUIRED RESOURCES:

MyMathTest Access Code Package, Pearson Canada, ISBN: 0321557077

Calculator: SHARP Scientific Calculator EL-531.

Note:

The use of some kinds of calculators, cell phones, and other electronic devices may be restricted during tests.

Pre-Trades / Pre-Technology Math   MTH 162-3

V.   EVALUATION PROCESS/GRADING SYSTEM:

Classroom Activities and Assignments   30%
MyMathTest Components   30%
Tests   40%

The following semester grades will be assigned to students:

Grade	Definition	Grade Point Equivalent
A+	90 – 100%	4.00
A	80 – 89%	
B	70 - 79%	3.00
C	60 - 69%	2.00
D	50 – 59%	1.00
F (Fail)	49% and below	0.00

CR (Credit)	Credit for diploma requirements has been awarded.
S	Satisfactory achievement in field /clinical placement or non-graded subject area.
U	Unsatisfactory achievement in field/clinical placement or non-graded subject area.
X	A temporary grade limited to situations with extenuating circumstances giving a student additional time to complete the requirements for a course.
NR	Grade not reported to Registrar's office.
W	Student has withdrawn from the course without academic penalty.

VI.   SPECIAL NOTES:

Attendance:
Sault College is committed to student success. There is a direct correlation between academic performance and class attendance; therefore, for the benefit of all its constituents, all students are encouraged to attend all of their scheduled learning and evaluation sessions. This implies arriving on time and remaining for the duration of the scheduled session.

VII. COURSE OUTLINE ADDENDUM:

The provisions contained in the addendum located on the portal form part of this course outline.